

8/5

771.3

.p2

POTEKHIN, L

Planirovaniye rashkhodov na soderzhaniye uchrezhdeniy prosveshcheniya i
zdravookhraneniya (Planning expenditures on the maintenance of educational and
health institutions, by) L. Potekhin (i Dr.) Moskva, Gosfinizdat, 1955.
215 p. tables.

Potekhin, L.

POTEKHIN, L.; ROZENFEL'D, I.; ITIN, N.; SOKOL'SKIY, N.; KUDRYASHOV, R., redaktor; FILIPPOVA, E., redaktor; DENISOVA, O., tekhnicheskiy redaktor

[Planning expenditures for maintaining educational and public health institutes] Planirovanie raskhodov na sodershanie uchrezhdenii prosveshcheniia i sdravookhraneniia. Moskva, Gosfinizdat, 1955. 215 p. (MIRA 9:2)

(Education--Finance) (Public health--Finance)

POTEKHIN, L. N.

32-2-52/60

AUTHOR: Potekhin, L. N.

TITLE: Electronic Programmed Transmitter for a Temperature Rise With a Determined Velocity Constant (Elektronnyy programnyy regulyator pod"yenu temperatury s zadannoy postoyannoy skost'yu)

PERIODICAL: Zavodskaya Laboratoriya, 1958, Vol.24, Nr2, pp.245-246 (USSR)

ABSTRACT:

For the purpose of obtaining an automatic heating with a constant velocity and a simultaneous graphical recording, a device was developed by a designing of the potentiometer ЭНА-12. The temperature regulator was fitted with various rotation velocities by means of a small motor acting by way of cogged wheels. The wheels can be adjusted in such a way, that the heating elements are connected corresponding to the desired heating per unit time. The temperature increase can be regulated with an accuracy of from 0,07 to 8,2°C per minute and it is possible to operate at temperatures from 0 - 1100°C. The device was tested with heating elements which operate at 6 - 7 Amp. In cases where an operation

Card 1/2

32-2-52/60

Electronic Programmed Transmitter for a Temperature Rise With a Determined Velocity Constant

with an amperage exceeding 9 Amps is necessary, the device must be connected by means of a subsidiary relay. There are 3 figures.

ASSOCIATION: Institute of Combustible Minerals, AS USSR
(Institut goryuchikh iskopayemykh Akademii nauk SSSR)

AVAILABLE: Library of Congress

1. Heating systems-Electronic controls Applications
2. Electronic equipment-

Card 2/2

BYVSHIKH, Mikhail Dmitriyevich; D'YAKONOV, Kuz'ma Filaretovich;
POTEKHIN, L.P., red.; MELEKHVA, L.S., tekhn. red.

[Controlling, measuring, and regulating apparatus for
chamber wood drying] Kontrol'no-izmeritel'nye i reguli-
ruiushchie pribory kamernoi sushki drevesiny. Arkhan-
gel'sk, Arkhangel'skoe knizhnoe izd-vo, 1962. 89 p.
(MIRA 16:7)

1. Laboratoriya sushki TSentral'nogo nauchno-issledovatel'-
skogo instituta mekhanicheskoy obrabotki drevesiny (for
Byvshikh, D'yakov). (Lumber--Drying)

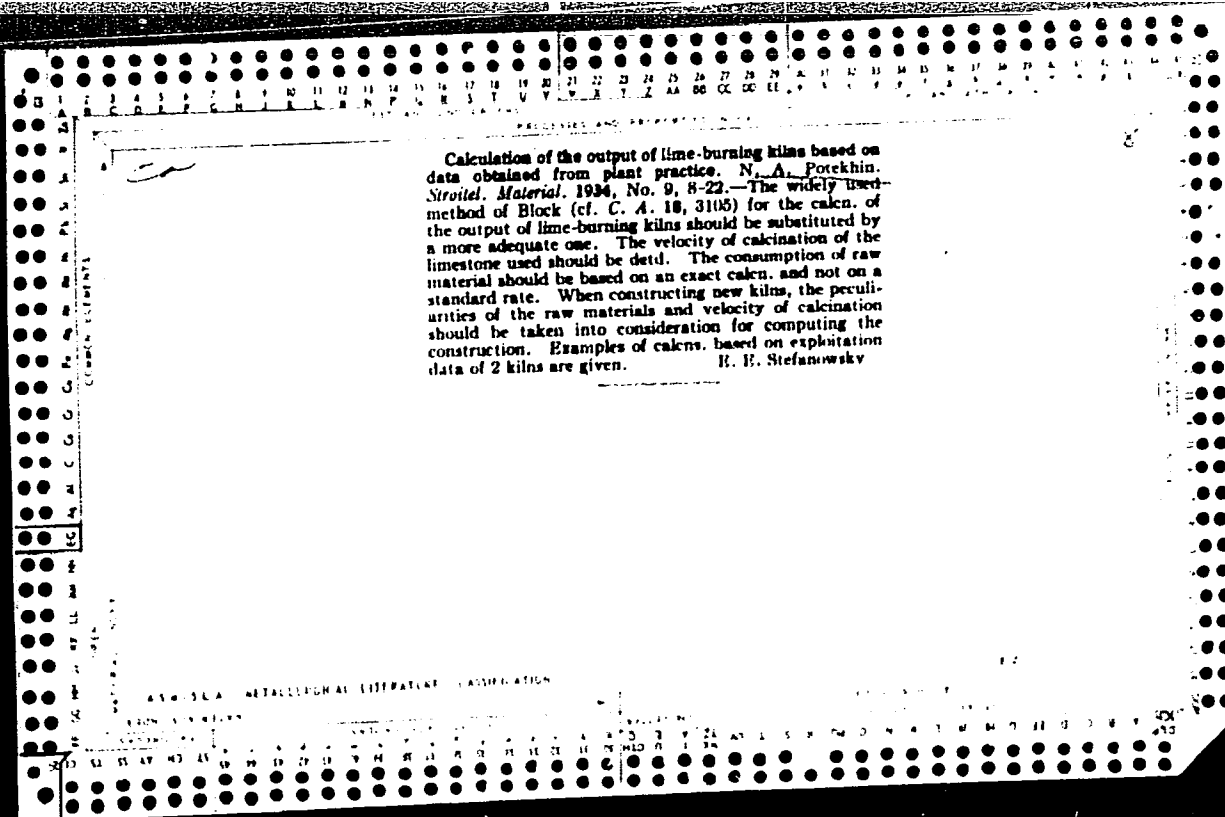
TSAPKO, A.S., otz. red.; GLIKMAN, S.A., doktor khim. nauk, prof., red.;
GEMP, K.P., st. nauchn. sotr., red.; GRUNER, V.S.,
doktor tekhn. nauk, red.; DANILOV, S.N., red.;
YEVTUSHENKO, V.A., kand. khim. nauk, red.; ZINOVA, A.D.,
kand. biol. nauk, red.; KIZEVETTER, I.V., doktor tekhn.
nauk, red.; KIREYEVA, M.S., kand. biol. nauk, red.;
VULIKHMAN, M.A., red.; POTEKHIN, L.P., red.

[Transactions of the First All-Union Conference of Workers
in the Algal Industry of the U.S.S.R.] Trudy Pervogo Vse-
soiuznogo nauchno-tekhnicheskogo soveshchaniia po vodo-
roslevnoi promyshlennosti SSSR. Arkhangel'sk, Arkhangel'skoe
knizhnoe izd-vo. Vol.1. 1962. 214 p. (MIRA 17:12)

1. Vsesoyuznoye soveshchaniye rabotnikov vodoroslevoy pro-
myshlennosti SSSR. 1st. 2. Chlen-korrespondent AN SSSR (for
Danilov). 3. Vsesoyuznyy nauchnyy institut morskogo rybnogo
khozyaystva i okeanografii (for Kireyeva). 4. Nachal'nik
Upravleniya rybnoy promyshlennosti Arkhangel'skogo sovnar-
khoza (for TSapko). 5. Saratovskiy gosudarstvennyy universiteta
im. N.G.Chernyshevskogo (for Glikman).

POTEKHIN, Leonid Valer'yevich; RCZENFEL'D, Iosif Borisovich; ITIN, Naum Yefimovich; KUDRYASHOV, R., red.; SHATROVA, T., red. izd-va; TELEGINA, T., tekhn. red.

[Planning expenditures for social and cultural measures]
Planirovanie raskhodov na sotsial'no-kul'turnye meropri-
iatiia. Moskva, Gosfinizdat, 1962. 286 p. (MIRA 15:11)
(Education--Finance) (Public health--Finance)



L 1930-66 EWT(m)/EPF(c)/ETC/EPF(r)-7/5 (m) ES, M/RM
ACCESSION NR: AT5022584 UR/3136/64/000/787/0001/0014

AUTHOR: Chernorotov, Ye. S.; Potekhin, N. V.; Novikov, P. D.

TITLE: Purification and preparation of water in nuclear reactors

SOURCE: Moscow. Institut atomnoy energii. Doklady, IAE-787, 1964. Vodoochistka i vodopodgotovka na yadernykh reaktorakh. Report no. 3, 1-14

TOPIC TAGS: water cooled nuclear reactor, water moderated reactor, water purification, ion exchange resin

ABSTRACT: The report describes the experience with the use of an H^+ -cation prefilter for purifying water of the primary loop of a physical and technical research reactor (RFT reactor) and of the reactor of the "Lenin" atomic icebreaker. The method of increasing the efficiency of mixed ion-exchange layers in purifying the water of first loops by using such prefilters or layers of cation exchanger in the hydrogenated form is discussed. If the pH of the water is about 7, the cation exchanger is used in the H form. In the presence of higher pH values, the cation exchanger is used in the salt form. However, in this case it is preferable to use separate (not mixed) layers with the cation exchanger in the corresponding salt form and the anion exchanger in the hydroxyl form. Orig. art. has: 2 figures.

Card 1/2

L 1930-66

ACCESSION NR: AP5022584

ASSOCIATION: None

SUBMITTED: 00

NO REF SOV: 001

ENCL: 00

OTHER: 003

SUB CODE: NP,GC

Card

MC
2/2

55 OK

DEMB, S.P.; POTEMIN, R.P.

Efficiency of using sloped boreholes in Perm Province
limestone quarries. Nauch.trudy Perm NIUI no. 4:130-132 '62.
(MIRA 17:6)

707015412 -2
NAZAROV, V.; POTEKHIN, S.

Simplifying the system for pay advances during the first half of the month. Bukhg. uch. 15 no. 5:60-62 My '58. (MIRA 11:5)

1. Nachal'nik mashinoschetnoy stantsii zavoda im. Likhacheva (for Nazarov). 2. Zamestitel' glavnogo bukhgaltera po mekhanizatsii ucheta zavoda im. Likhacheva (for Potekhin)
(Wages)

SOV/1672

PHASE I BOOK EXPLOITATION

25(3)

USSR. Upravleniye po organizatsii i mekhanizatsii ucheta

Mekhanizatsiya ucheta i vychislitel'nykh rabot na promyshlennom pred-
priyatii; Gornik state (Mekhanizatsiya of Accounting and Comput-
ing Operations in the Mining Industry; Collection of Arti-
cles) Moscow, Gosstatizdat, 1957. 125 p. 5,100 copies printed.

Additional Sponsoring Agency: USSR. Tsentral'noye statisticheskoye
upravleniye.

Ed.: V.A. Daliyants; Tech. Ed.: A.A. Kapralova.

PURPOSE: This book is intended for technical personnel servicing
computers, tabulators, punch card machines, etc., and for those
using this equipment.

COVERAGE: This collection of articles reviews various aspects of
mechanical invoicing, use of key-operated calculators in account-
ing, functions of interplant clearing houses, accounting of state
taxes using business machines and computers, and operation of
punch card machines. Technical features of computing and calcu-
lating are discussed. Measures to improve reliability are
outlined. No personalities are mentioned. There are 8 Soviet
references.

TABLE OF CONTENTS:
Ladarev, V. and A. Safonov. For Further Improvement of the Mechni- 32
sation of State Tax Accounting

Botakhin, S. Methods of Perforation Control 40

Isakov, V. On Perforation Control Methods 53

Rapoport, Ia. Effectiveness of Mechanized Engineering and Tech- 56
nical Calculations

Rapoport, M. Technique of Calculating Finite Differences on 80
Computing Machines

Khushinov, B. Compilation of Calibrating Tables on Tabulating 109
Machines (Experience of the Computing Business Machine Service

Center of the Novo-Ufimskiy neftepererabatyvayushchiy zavod- New

Petroleum Refinery at Ufa)

Tikhomirov, Yu. and N. Kotov. Automatic Flipping of the Tabu- 120
lator and Switching on of a Light Signal With the Appearance of a

"Short" in the Tabulator and the Totalling Perforator

Pokh, M. Modernization of the Totalling Perforator for the T- 123
4M Tabulator

AVAILABLE: Library of Congress (RP5679.R8)

Card 1/1

JG/ba

8-5-59

BEDNYAGIN, F.I., kand. sel'skokhozyaystvennykh nauk; BUDNAYA, M.V.;
POTEKHIN, S.A.

Effect of the nutritive value of corn, protein, and other feeds
on milk production. Dokl. Akad. sel'khoz. 23 no.7:35-38 '58.
(MIRA 11:8)

1. Krasnodarskiy nauchno-issledovatel'skiy institut sel'skogo
khozyaystva.

(Dairy cattle---Feeding and feeding stuffs)

DATSEVICH, M.F.; POTEKHIN, S.S.; ZIMIN, F.F.; POPOV, I.Ye.; RUSIN, P.N.;
ANOKHIN, S.D.; NESTEROV, V.F.; FROLOV, V.A.; GRYAZNOV, V.A., red.;
USTIYANTS, V.A.; KAPRALOVA, A.A., tekhn.red.

[Modernizing punched card calculating machines] Opyt modernizatsii
schetno-perforatsionnykh mashin. Moskva, Gos. stat. izd-vo, 1957.
75 p. (MIRA 11:4)

1. Russia (1923- U.S.S.R.) Upravleniye "Soyuzmashuchet."
(Punched card systems)
(Calculating machines)

ACC NR: AR7000951 SOURCE CODE: UR/0275/66/000/011/B015/B015

AUTHOR: Potekhin, V. A.

TITLE: Approximation of static volt-ampere characteristic of tunnel diode

SOURCE: Ref. zh. Elektronika i yeye primeneniye, Abs. 11B86

REF SOURCE: Tr. Tomskogo in-ta radioelektron. i elektron. tekhn., no. 4, 1965, 68-73

TOPIC TAGS: volt ampere characteristic, tunnel diode, approximation method, approximation calculation, approximation error, error

ABSTRACT: Existing approximation methods are discussed for static volt-ampere characteristics of tunnel diodes. The approximation proposed allows calculation of the characteristics of tunnel diode at room temperature. The relative error in such calculations is not more than $\pm 10\%$. Orig. art. has: a bibliography of 13 reference items. [Translation of abstract]

[AM]

SUB CODE: 09/

Card 1/1

UDC: 621.382.233

POTEKHIN, V.K.

Electronic frequency converters for precise measurements.

Izm. tekhn. 20 no.2:46-49 P. '59.

(MIRA 12:3)

(Frequency changers)

Р. ТЕХНИЧ. В. К.

24(0); 5(4); 6(2) PHASE I BOOK EXPLOITATION SOV/2215
Vsesoyuznyy nauchno-issledovatel'skiy institut metrologii imeni
D.I. Mendeleeva
Referaty nauchno-issledovatel'skikh rabot; sbornik No. 2 (Scientific
Research Abstracts; Collection of Articles, Nr. 2) Moscow,
Standartglz, 1958. 139 p. 1,000 copies printed.
Additional Sponsoring Agency: USSR, Komitet standartov, mer i
izmeritel'nykh priborov.

Ed.: S. V. Reshetina; Tech. Ed.: M. A. Kondrat'yeva.

PURPOSE: These reports are intended for scientists, researchers,
and engineers engaged in developing standards, measures, and
gages for the various industries.

COVERAGE: The volume contains 128 reports on standards of measure-
ment and control. The reports were prepared by scientists of
institutes of the Komitet standartov, mer i izmeritel'nykh
priborov pri Sovete Ministrov SSSR (Commission on Standards,
Measures, and Measuring Instruments under the USSR Council of
Ministers). The participating institutes are: VNIIM
Vsesoyuznyy nauchno-issledovatel'skiy metrologii imeni D.I.
Mendeleeva (All-Union Scientific Research Institute of Met-
rology imeni D.I. Mendeleev) in Leningrad; Sverdlovsk branch
of this institute; VNIK - Vsesoyuznyy nauchno-issledovatel'skiy
institut komiteta standartov, mer i izmeritel'nykh priborov
(All-Union Scientific Research Institute of the Commission
on Standards, Measures, and Measuring Instruments), created
in Moscow; Moskovskiy gosudarstvennyy institut mer i
izmeritel'nykh priborov (Moscow State Institute of Measures
and Measuring Instruments, October 1, 1955; VNIIFTRI -
Vsesoyuznyy nauchno-issledovatel'skiy institut fiziko-tekhnicheskikh i radiotekhnicheskikh izmereniy (All-Union Scientific
Research Institute of Physicotechnical and Radio-technical
Measurements) in Moscow; KHMIMP - Khar'kovskiy gosudarstvennyy
institut mer i izmeritel'nykh priborov (Khar'kov State Institute
of Measures and Measuring Instruments); and NGMIP - Novosi-
birskiy gosudarstvennyy institut mer i izmeritel'nykh priborov
(Novosibirsk State Institute of Measures and Measuring Instru-
ments). No personalities are mentioned. There are no references.

Pruss, K.Y., and V.I. Potapov (VNIIFTRI). Printing Chronograph
of the Pkh-2 Type With a Reading Accuracy of 0.001 Second 39

Potapov, V.I. (VNIIFTRI). Apparatus of the UPS-2 Type for
Automatic Peeding of Time Signals 40

Yarabrut, A.D., and V.K. Potchkin (VNIIM). Frequency Converter
for Receiving Rhythmic Time Signals on the Chronoscope by the
Continuous Readout Method 41

Tovchigrechko, S.S. (VNIIM). Receiving Rhythmic Time Signals on
a Chronoscope With a Synchronous Motor Fed by a 1016(6)-cycle
Source 42

Tovchigrechko, S.S., and E.A. Kamechkin (VNIIM). Improving the
Synchronous Chronoscope 43

Kamechkin, E.A. (VNIIM). Instrument for Receiving Electrical
Pulses From Contactless Chronometers 44

Card 9/27

VEYSBRUT, A.D.; POTEKHIN, V.K.

Pulse counter using decatrons and ~~its~~ use as an electronic
chronometer and frequency meter. Trudy inst. Kom. stand.,
mer i im. prib. no. 52:138-142 '61. (MIRA 14:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut metrologii
im. D.I. Mendeleyeva.

(Counting devices) (Frequency measurements)
(Pulse techniques (Electronic))

SOV/115-59 -2-25/38

8(3)

AUTHOR: Potekhin, V.K.

TITLE: Electronic Frequency Transformer for Precise Measuring
(Elektronnyye preobrazovateli chastoty dlya tochnykh izmereniy)

PERIODICAL: Izmeritel'naya tekhnika, 1959, Nr 2, pp 46-49
(USSR)

ABSTRACT: The author states that highly stable frequencies are necessary for a whole series of precision measurements. The VNIIM, requiring such stable frequencies found that they were hard to obtain without technical complications. It was therefore found expedient to transform a highly stable output frequency into the required frequencies. The transformed frequencies differ fractionally from the output frequencies. There are two ways of obtaining "fractional" frequencies: 1) electromechanical; 2) electronic. The paper then describes briefly the electronic method which consists of merging, dividing and multiplying output frequency parts. The VNIIM has also pro-

Card 1/2

SOV/115-59-2-25/38
Electronic Frequency Transformer for Precise Measuring

duced a "celestial" clock according to this method. It greatly facilitates the processing of astronomical observations and has enabled the "celestial" frequency to be relayed to the observatories of Pulkov and Leningrad University. Frequency-2164 cycles, obtained in the laboratory of magnetic measurements, is intended for precise measurement of freely mobile proton frequencies in the Earth's magnetic field. There are 3 circuit diagrams and 7 references, 6 of which are Soviet and 1 English.

Card 2/2

PROSKURYAKOV, V.A.; YAKOVLEV, V.I.; POTEMKIN, V.M.

Oxidizing oil shales with atmospheric oxygen. Trudy VNIIT
no.12:11-13 '63. (MIRA 18:11)

POTEKHIN, V.V.; SLESAREVA, L.V.

Diagnostic errors in lung cancer. Zdrav. Turk. 8 no.1:11-14
Ja '64. (MIRA 17:5)

1. Iz kafedry rentgenologii i meditsinskoy radiologii (zaveduyushchiy
V.V. Slesarev) i fakul'tetskoy terapii (zaveduyushchiy -- dotsent
Ye.A. Pletnev) Turkmenskogo gosudarstvennogo meditsinskogo instituta
i Turkmenskoy respublikanskoy klinicheskoy bol'nitsy im. N.I.
Pirogova (glavnyy vrach M.B. Shapiro)

POTEKHIN, V.V.; TAGIROVA, K.M.

Case of angiosarcoma of the clavicle. Zdrav. Turk. 8 no.2:
21-22 F'64 (MIRA 17:4)

1. Iz kafedry propedevticheskoy khirurgii (zav. - prof. N.M. Tachmuradov) i rentgenologii (ispolnyayushchiy obyazannosti zaveduyushchego V.V. Slesarev) Turmenskogo gosudarstvennogo meditsinskogo instituta i Turkmenskoy respublikanskoy klinicheskoy bol'nitsy imeni Pirogova) glavnyy vrach M.B. Shapiro)

POTEKHIN, Ya. (Leningrad)

Technical inspector of apartment houses. Zhil.-kom. khoz. 8 no.12:
16-17 '58. (MIRA 13:1)

(Leningrad--Apartment houses--Maintenance and repair)

POTEKHIN, Ye.
POTEKHIN, Ye.

Centralized delivery of dry goods. Sov. torg. no.2:60 P '58.
(MIRA 11:1)

1. Upravlyayushchiy Kuybyshevskoy bazoy Glavgalanterei.
(Kuybyshev--Delivery of goods) (Dry goods)

VOROB'YEV, A.A.; DIDENKO, A.N.; LISITSYN, A.I.; MOROZOV, B.N.; FOTEKHIN, Yu.I.;
SALIVON, L.G.; FILATOVA, R.M.

A 10-Mev. wave-guide type synchrotron. Atom. energ. 18 no.6:633-634
Je '65. (MIRA 18:7)

I. 64197-65 EAT(a)/EPA(w)-2/EHA(a)-2 LIF(c)
 S/0275/64/000/011/A053/A053
 621.384.6
 16
 13
 ACCESSION NR: AN5004572
 SOURCE: Ref. zh. Elektronika i yeye primeneniye. Svyadnyy tom, Abs. 11A332
 AUTHOR: Korozov, B. E.; Varenkov, V. M.; Potekhin, Yu. I.; Shishenina, L. G.
Filatova, R. M.
 TITLE: Accelerating system of the waveguide-type cyclic accelerator
 CITED SOURCE: Sb. Elektron. uskoriteli. M., Vyssh. shkola, 1964, 138-147
 TOPIC TAGS: accelerator, cyclic accelerator, waveguide type accelerator
 TRANSLATION: Calculation of parameters of an accelerating system of the waveguide-type cyclic accelerator is presented; the results of an experimental investigation of the system built according to these calculations are described. The experimental and estimated datae are in good agreement.
 ENCL: 00
 SUB CODE: EC

282
 Card 1/1

L 3460-66 EWT(m)/EPA(w)-2/EWA(m)-2 IJP(c) DM

ACCESSION NR: AP5016934

UR/0089/65/018/006/0633/0634
621.384.612

AUTHORS: Vorob'yev, A. A.; Didenko, A. N.; Lisitsyn, A. I.;
Morozov, B. N.; Potekhin, Yu. I.; Salivon, L. G.; Filatova, R. M.

TITLE: 10 MeV waveguide synchrotron

SOURCE: Atomnaya energiya, v. 18, no. 6, 1965, 633-634

TOPIC TAGS: synchrotron, circular accelerator, electron accelerator,
high energy accelerator, waveguide

ABSTRACT: After first listing some of the theoretical problems involved in the design of accelerators of this type and dealt with at Institut yadernoy fiziki Tomskogo politekhnicheskogo instituta (Scientific Research Institute of Nuclear Physics of the Tomsk Polytechnic Institute), the authors describe briefly the 10 MeV synchrotron constructed and in operation at this institute since December 1963. The accelerating system is a rectangular waveguide bent in the shape of a ring, loaded with diaphragms on the outer wall. A standing H_{018} mode

Card 1/3

L 3460-66

ACCESSION NR: AP5016934

in the $\pi/2$ mode is excited in the waveguide. The radius of the equilibrium orbit of the electrons, on which the phase velocity of the H_{018} wave is equal to the velocity of light, is 13 cm. The waveguide interaction space measures 6 x 6 cm. The system Q is approximately 300, the shunt resistance is approximately 0.07 Meg. The electrons are first accelerated to 3 MeV in the betatron mode by a Kerst gun. The high-frequency electromagnetic oscillations are generated by a pulsed 10-cm generator of 5,000 μ sec pulses of 400 W each. The operating pressure is 2×10^{-5} mm Hg. Several of the control and construction features are briefly described. 'We thank the students of the Tomsk Polytechnic Institute V. I. Zhuravlev, A. M. Voloshin, P. I. Matyazh, A. A. Kushch, and A. N. Pershin, who participated in the adjustment and startup of the installation, and also Ye. S. Kovalenko and A. P. Ol'shanskiy for participating in the development of the accelerator theory, its design, and model test.' Orig. art. has: 1 figure

ASSOCIATION: None

Card 2/3

BVK

Card 3/3

POTEKHINA, K.L.

Diastasuria in epidemic parotitis. Vrach. delo no.4:113-117 Ap'63
(MIRA 16:7)

1. Kafedra infektsionnykh bolezney (zav.-dotsent B.N.Kotlarenko)

L'vovskogo meditsinskogo instituta.

(AMYLASE) (MUMPS) (PANCREAS---DISEASES)

KAPITANOV, N.N., POTEKHINA, L.A., PETROVA, N.P.

Forces for suturing major blood vessels. Med.prom. 12 no.12:52-53
D'58 (MIRA 11:12)

1. Nauchno-issledovatel'skiy institut eksperimental'noy khirurgicheskoy
apparatury i instrumentov.
(SUTURES)
(SURGICAL INSTRUMENTS AND APPARATUS)

LI TIN-MIN' [Li T'ing-min] (Moskva, ~~1925~~ ~~1923~~ 3/25,
Obshchezhitniye aspirantov AMN SSSR); KUKUSHKIN, L.I.;
POTEKHINA, L.A.

Apparatus for applying a caval-pulmonary anastomosis (CPA).
Grud. khir. 2 no.4:121-124, JI-Ag '60. (MIRA 15:6)

1. Iz Institute grudnoy khirurgii AMN SSSR (dir. - prof.
S.A. Kolesnikov) Nauchno-issledovatel'skogo instituta eksper-
imental'noy khirurgicheskoy apparatury i instrumentov (dir.
M.G. Anan'yev).

(SURGICAL INSTRUMENTS AND APPARATUS)
(BLOOD VESSELS--SURGERY)

KUKUSHKIN, L.I.; POTEKHINA, L.A.

Apparatus for suturing large blood vessels. Med. prom. 15
no.7:53-54 J1 '61. (MIRA 15:6)

1. Nauchno-issledovatel'skiy institut eksperimental'noy
khirurgicheskoy apparatury i instrumentov.
(BLOOD VESSELS—SURGERY)
(SUTURES)

ANDROSOV, P.I., doktor meditsinskikh nauk; ~~POTEKHINA~~, L.A., inzhener; SAVCHENKO, Ye.D. kandidat meditsinskikh nauk; ~~STREKOPITOV~~, A.A., laureat Stalinskoy premii; TULYAKOVA, L.S., vrach; SHEYNBER, S.A., doktor tekhnicheskikh nauk.

A new technique for suturing bronchial stumps. Khirurgiia no.8:66-70
Ag. '55. (MIRA 9:2)

1. Iz Nauchno-issledovatel'skogo instituta eksperimental'noy khirurgicheskoy apparatury i instrumentov (dir.-kandidat meditsinskikh nauk M.G. Anan'yev) Ministerstva zdravookhraneniya SSSR.

(BRONCHI, surg.
suturing of stump with tantalum braces, technic)

PETROVA, N.P.; KUKUSHKIN, L.L.; POTEKHINA, L.A.; BOGOMOLOVA, G.R.

Apparatus for suturing the large blood vessels and its use. Trudy
NIIKHAI no.5:45-48 '61. (MIRA 15:8)

1. Nauchno-issledovatel'skiy institut eksperimental'noy khirurgi-
cheskoy apparatury i instrumentov.
(SUTURES) (BLOOD VESSELS--SURGERY)

BOROVKOVA, A.M., kand. biol. nauk; POTEKHINA, L.F., kand. biol. nauk.

Travassosius rufus Khalill, found in beavers of the U.S.S.R. Trudy
VIGIS 5:73-74 '53. (MIRA 11:1)
(Berezina River--Nematoda) (Parasites--Beavers)

SKARBILOVICH, T.S., kand.biologicheskikh nauk; POTEKHINA, L.F., kand.
biologicheskikh nauk

Nematodes of ginseng. Trudy VIGIS 6:411-414 '59. (MIRA 15:5)
(Ginseng--Diseases and pests)
(Nematode diseases of plants)

POTEKHINA, L.F., kand.biologicheskikh nauk; BELYAYEVA, M.Ya., aspirant

Discovery of Trichostrongylus axei in beavers. Trudy VIGIS
6:159 '59. (MIRA 15:5)

(Byalovezhskaya Pushcha--Trichostrongylus)
(Parasites---Beavers)

POTEKHINA, L.F., kand.biologicheskikh nauk

New trematode *Plagiorchis Dubnicki* nov. sp. from the intestines
of the fox. Trudy VIGIS 6:156-158 '59. (MIRA 15:5)
(*Plagiorchis*) (Parasites--Foxes)

DEMIDOV, N.V., kand.veterinarnykh nauk; POTEKHINA, L.F., kand.biologicheskikh nauk

Effect of carbon tetrachloride and hexachloroethane on the preimaginal forms of Fasciola. Trudy VIGIS 6:206-211 '59.

(MIRA 15:5)

(Anthelmintics)

(Liver flukes)

POTEKHINA, I. I.

Streptosporangium rubrum n.sp., a new species of the genus
Streptosporangium. Mikrobiologiya 34 no.2:292-299 Apr '65.
(MIRA 18:6)

1. Tomskiy gosudarstvennyy universitet.

5.3610

78296
SOV/79-30-3-50/69

AUTHORS: Tronov, B. V., Bortovoy, I. M., Potekhina, L. I.

TITLE: Complex Formation of Amines With Different Organic Compounds. I. Complexes of Benzidine and Naphthlamines With Some Halogenated Phenols

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol 30, Nr 3, pp 982-985 (USSR)

ABSTRACT: Complex formation of benzidine, α -naphthylamine, and β -naphthylamine with halogenated phenols was studied. The complexes, shown in Table 1, were obtained by simple addition of the components in a suitable solvent (usually benzene).

Card 1/5

Complex Formation of Amines With Different Organic Compounds. I.

78296

SOV/79-30-3-50/69

Key to Table 1: (a) Nr; (b) amines; (c) phenols; (d) molecular composition of complexes; (e) mp; (f) benzidine.

(a)	(b)	(c)	(d)	(e)
1	(f)	4-ClC ₆ H ₄ OH	1:2	122-123°
2	(f)	4-BrC ₆ H ₄ OH	1:2	123-124
3	(f)	4-IC ₆ H ₄ OH	1:2	130-150
4	γ-C ₁₀ H ₇ NH ₂	4-ClC ₆ H ₄ OH	1:1	40-41
5	α-C ₁₀ H ₇ NH ₂	4-BrC ₆ H ₄ OH	1:1	52-53.5
6	α-C ₁₀ H ₇ NH ₂	4-IC ₆ H ₄ OH	1:1	61-62
7	β-C ₁₀ H ₇ NH ₂	4-ClC ₆ H ₄ OH	1:1	70-71
8	β-C ₁₀ H ₇ NH ₂	4-BrC ₆ H ₄ OH	1:1	71-73
9	β-C ₁₀ H ₇ NH ₂	4-IC ₆ H ₄ OH	1:1	88-89

Card 2/5

Complex Formation of Amines With Different Organic Compounds. I.

78296

304/79-36-3-96/69

The complexes obtained were tested for their bactericidal action according to suspension method, using B. Coll. Twenty min in 1:90 phenol was taken as standard. Results are given in Table 2.

Table 2. Bactericidal action of complex compounds and their components on B. coll. (a) Nr; (b) compounds tested; (c) compound concentration (%); (d) bactericidal action at exposure (in min); (e) benzidine + 4-chlorophenol; (f) benzidine + 4-bromophenol; (g) benzidine + iodophenol; (h) α -naphthylamine + 4-chlorophenol; (i) α -naphthylamine + bromophenol; (j) α -naphthylamine + 4-iodophenol; (k) β -naphthylamine + 4-chlorophenol; (m) β -naphthylamine + bromophenol; (n) β -naphthylamine + 4-iodophenol; (p) benzidine; (r) α -naphthylamine; (s) β -naphthylamine; (t) 4-chlorophenol; (u) 4-bromophenol; (v) 4-iodophenol.

Card 3/5

Complex Formation of Amines With Different Organic Compounds

78296

SOV/79-30-3-50/69

(a)	(b)	(c)	(d)	
			20	40
1	(e)			
2	(f)	0.5	-	+
3	(g)	0.295	-	+
4	(h)	0.248	-	-
5	(i)	0.483	+	+
6	(j)	0.314	±	+
7	(k)	0.414	±	+
8	(l)	0.258	-	+
9	(m)	0.283	±	+
	(n)	0.411	±	+
	(p)			
	(q)	0.43	-	-
	(r)	0.5	±	+
	(s)	0.493	-	-
	(t)	0.518	+	+
	(u)	0.513	-	+
	(v)	0.284	±	+

Note: (+) lack of B. coli growth (i.e.) positive bactericidal action); (-) growth of B. coli; (±) growth at first repetition and lack of growth at second repetition.

Card 4/5

Complex Formation of Amines With Different
Organic Compounds. I.

75296
SOV/79-30-3-50/69

Some of the experiments were conducted with the participation of M. A. Kuchmar. There are 2 tables; and 7 references, 1 U.S., 6 Soviet. The U.S. reference is: O. Rahn, Injury and Death of Bacteria by Chemical Agents (1945).

ASSOCIATION: Tomsk State University (Tomskiy gosudarstvennyy universitet)

SUBMITTED: May 12, 1959

Card 5/5

POTEKHINA, L.F.
PETROV, A.M., prof., doktor vet. nauk; POTEKHINA, L.F., kand. biol. nauk.

Helminths of the mammals and predaceous animals of Tajikistan. Trudy
VIGIS 5:82-94 '53. (MIRA 11:1)
(TAJIKISTAN--WORMS, INTESTINAL AND PARASITIC)

PETROV, A.M., prof., doktor vet. nauk; POTEKHINA, L.F., kand. biol. nauk.

Trichocephalus spalacis nov. sp., a new species of nematode found
in mole rats. Trudy VIGIS 5:95-98 '53. (MIRA 11:1)
(Kherson Province--Nematoda) (Parasites--Rodentia)

POTEKHINA, L.I.

Subculturing actinomycetes with a minimum amount of inoculum.
Nauch.dokl.vys.shkoly; biol.nauki no.2:161-165 '63.
(MIRA 16:4)

1. Rekomendovana kafedroy fiziologii i biokhimii rasteniy
Tomskogo gosudarstvennogo universiteta im. V.V.Kyubysheva.
(ACTINOMYCES)

(BACTERIOLOGY--CULTURES AND CULTURE MEDIA)

SLAVNINA, T.P.; POTEKHINA, L.I.; KUZNETSOVA, Z.D.; SIMONOVA, Ye.I.

Characteristics of soil in the rhizosphere zone of winter rye
and oats in dark-gray and gray forest soils. Nauch.dokl.vys.
shkoly;biol.nauki no.4:190-198 '58. (MIRA 11:12)

1. Rekomendovana kafedroy pochvovedeniya Tomskogo gosudarstvennogo
universiteta imeni V.V.Kyryshsheva.
(Rhizosphere microbiology) (Rye) (Oats)

POTEKHINA, L. I.

Discussion of problems concerning the interrelationships of biology
with physics and chemistry at the Tomsk University. Nauch. dokl.
vys. shkoly; biol. nauki no. 3:213-216 '60. (MIRA 13:8)
(Biological research)

POTEKHINA, L.I.

Microbiological characteristics of gray forest soils of the Tomsk district. L. I. Potekhina. *Trudy Tom. Gosudarst. Univ. im. P. I. Kaptchenko* 14, 101-4 (1951).—Plate counts showed that nos. of microorganisms increased with darkness of color of gray forest soils. The forms found, in order of abundance in surface soils, were cocci, bacilli, oval forms, yeasts, and algae. Bacilli were the most abundant form at a depth of 50 cm. A relatively const. value of 200-300 million microorganisms per mg. of total N in the soil was found. Ronald G. Menzel

SHIFRIN, K.S.; PERELMAN, A.Ya.; POTEMINA, L.K.

Tables for calculating the spectrum of particles of a disperse
system on the basis of its transparency. Izv. GAO no. 153, 1964
(NINA 17:7)
211 1964.

ZAYDMAN, N.M.; ORECHKIN, D.B.; POTEKHINA, L.F.; POLUKHINA, V.M.

Spectrophotometric methods of control in the manufacture of some
organic products. Trudy Kom.anal.khim. 13:348-356 '63.

(MIRA 16:5)

(Phenols)

(Hydrocarbons)

(Spectrophotometry)

ROZENFEL'D, Iosif Borisovich; POTEKHIN, Leonid Valer'yevich;
KUDRYASHOV, R., otv. red.

[Control over the financial operations of institutions
serving social and cultural needs] Kontrol' za finanso-
voi deiatel'nost'iu sotsial'no-kul'turnykh uchrezhdenii.
Moskva, Finansy, 1965. 189 p. (MIRA 18:4)

POPOVA, N.I., GIMBEL, A.V., GIMBEL, V.I.

Investigation of the effect of acid treatment on the filtration
of pyroclasts with a cation collector. Izv. vuz. khim. 2000,
tome 8, no. 10, 1965.

1. Katedra obogashcheniya rudy raskikh i radioaktivnykh metallov
Moskovskogo instituta stal' i splavov.

ABEIDMA, L.A.; PLODOWSKI, M.L.

Appearance of the formation of new proteins under the influence
of ionizing radiations during spermatogenesis in *Peromyscus* sp-
lanogaster. Radiobiologia 4 no.3:168-169 1964.

(LRA 17:13)

BEL'GOVSKIY, M.L.; ABELEVA, E.A.; POTEKHINA, N.A.

Nature of the relationship between the frequency of lethals appearing
at different stages of spermatogenesis and the dose of X rays. Dokl.
AN SSSR 124 no.4:922-924 F '59. (MIRA 12:1)

1. Predstavleno akademikom V.N. Sukachevym.
(X RAYS--PHYSIOLOGICAL EFFECT) (SPERMATOGENESIS)

SHAVEL'ZON, R.A.; POTEKINA, N.A.

Method of the primary selection of productive *Chlorella* strains.
(MIRA 19:1)
Genetika no.5:65-67 N '65.

1. Institut biologicheskoy fiziki AN SSSR, Moskva. Submitted
July 14, 1965.

SOV/20-124-4-55/67

24(0), 17(10)
AUTHORS:

Bel'govskiy, M. L., Abeleva, E. A., Potekhina, N. A.

TITLE:

The Nature of Dependence of the Frequency of Lethals Arising at Various Stages of Spermatogenesis on the Dose of X-Rays
(Kharakter zavisimosti chastoty letaley, vznikayushchikh na raznykh stadiyakh spermatogeneza, ot dozy rentgenovskikh luchey)

PERIODICAL:

Doklady Akademii nauk SSSR, 1959, Vol 124, Nr 4, pp 922-924 (USSR)

ABSTRACT:

The concept of the mutagenic effect of ionizing radiation was formed primarily according to the nature of dependence of the frequency of various mutational types on the kind of radiation, their dose and distribution in time. Already in the thirties it was observed that the frequency of recessive lethal mutations in the case of *Drosophila* is independent within very wide limits (γ -rays up to X-rays with $2.2 \text{ \AA}$) of wave-length and distribution of the dose in time. It is proportional to the amount of dose. Therefrom it was concluded that "either the individual ionizations or activations, or their individual bundles are used to play a mutagenic part" and "these mutagenic agents do not interact with one another on the formation of point mutations (tochkovyye mutatsii)." Thus, the conclusions drawn on the mechanism of the mutagenic effect

Card 1/4

SOV/20-124-4-55/67

The Nature of Dependence of the Frequency of Lethals Arising at Various Stages of Spermatogenesis on the Dose of X-Rays

were based on the above mentioned nature of dependence on the dose as one of the most important facts. However, the correctness of these conclusions was doubted later since the genetic changes (of the recessive lethal mutations) are irregular. Scientists have disagreed in this respect up till now (Refs 1-3,5), and there are some additional complications in the corresponding interpretation. At the beginning of the fifties it was found that various stages of the development of *Drosophila* sperms differ in their sensitivity to radiation; furthermore it was observed that the increase of mutational frequency is not linear in this case (Refs 6-9). In order to clarify the above mentioned dependence separately in mature sperms, spermatids and spermatogonia the authors irradiated hybrid F_1 -males with 1000 and 4000 r X-rays, which were not older than 24 hours and had been crossed from 2 in-breeding lines (Algerische and Ebrero). They were immediately brought together with unimpregnated females of the "y-Meller-5" line with two inversions and recessive yellow and apricot genes. They were kept here for 48 hours and were copulated with other unimpregnated females every 2-3 days. The offspring F_1 from eggs of these females which were impregnated

Card 2/4

SOV/20-124-4-55/67

The Nature of Dependence of the Frequency of Lethals Arising at Various Stages of Spermatogenesis on the Dose of X-Rays

during the 1st-2nd, 7-8th, and 15-16th day after irradiation, was preserved. The females were individually crossed with their brothers. If a lethal was produced in an irradiated chromosome, no males of the wild type appeared in the F_2 culture. The frequency of lethal formation was calculated according to the percentage of such cultures. 3 portions of F_1 offspring originated from sperms during the above mentioned stage of development. It follows from the results (Table 1) that the age-conditioned irregularity of sperms does not play an important part in the study of the total mutability of sperms. The data obtained by this irradiation virtually characterize only the mutability of mature sperms. The conclusions drawn from the experiments carried out without exact age examination of the irradiated sex cells must not be regarded as being useless because of lack of such an examination, provided these data refer only to mature sperms. In conclusion, the authors discuss some suppositions which are to explain the above mentioned phenomena, but reject them. Thus, the causes of lacking linear dependence of the frequency of recessive lethals in the spermatids require another explanation. There are

Card 3/4

ZHURBITSKIY, Z.I., otv. red.; GENKEL', P.A., red.; GUNAR, I.I., red.;
POTAPOV, N.G., red.; POTEKHINA, N.A., red.

[Role of mineral elements in the metabolism and productivity
of plants] Rol' mineral'nykh elementov v obmene veshchestv i
produktivnosti rastenii. Moskva, Izd-vo "Nauka," 1964. 358 p.
(MIRA 17:7)

1. Akademiya nauk SSSR. Institut fiziologii rastenii.

KARZUBOV, B.V., inzh.; POTATURKIN, N.A., inzh.; SELIVOKHIN, O.A., inzh.;
KAZANIN, K.G., inzh.

Laying tracks on the Kzyl-Tu - Irtyskoye line. Transp. stroi.
14 no.2:8-9 F '64. (MIRA 17:4)

42697

8/747/62/000/000/021/025
D243/D307

27.1220

AUTHORS: Abeleva, E. A. and Potekhina, N. A.

TITLE: The radiation sensitivity of various stages of spermatogenesis in *Drosophila melanogaster*

SOURCE: Radiatsionnaya genetika; sbornik rabot. Otd. biol. nauk AN SSSR. Moscow, Izd-vo AN SSSR, 1962, 312-318

TEXT: The frequency of dominant lethals on repeated irradiation of *Drosophila* sperm and spermatids was studied to elucidate the reversibility of physiological damage and the mutagenic effects of repeated low dose radiation. Male F_1 hybrids of Algerian and Erebro strains (24 hours old) received (1) 2400 r in one dose or 3 x 800 r at 1 1/2 hour intervals, and (2) 400 r and 1200 r in a single dose or 3 x 400 r at 3 hour intervals. In (1), since no difference was discerned between single and repeated doses, the interdose interval was increased to 3 hours and the doses were changed to 1200 r maximum and 400 r minimum. As anticipated, repeated radiation did not affect the frequency of dominant lethals in the sperm. In

Card 1/2

ABELEVA, E.A.; BEL'GOVSKIY, M.L. [deceased]; POTEKHINA, N.A.

Mutations in unirradiated chromosomes of egg cells fertilized by
irradiated male gametophytes. Radiobiologiya 1 no.1:123-127 '61.
(MIRA 14:7)

1. Institut biologicheskoy fiziki AN SSSR, Moskva.
(X RAYS—PHYSIOLOGICAL EFFECT)
(ZOOLOGY—VARIATION)

AUTHOR: Potekhina, N.D.

51-3-19/24

TITLE: On the problem of calculation of luminescence spectra of crystal phosphors. (K voprosu o raschete spektrov lyuminestsentsii kristallofosforov).

PERIODICAL: "Optika i Spektroskopiya" (Optics and Spectroscopy), 1957, Vol.2, No.3, pp.388-392 (U.S.S.R.)

ABSTRACT: Sodium chloride crystal activated with silver is considered. It has absorption (maximum at 210 mμ) and emission (maximum 250 mμ) bands. Certain bands are usually ascribed to electron transitions of the activator ion. The problem is which are the transitions that cause the luminescent bands. The author attempts to answer this question by semi-classical calculations which take into account the effect of the crystal field on the energy levels of the silver activator ion. The binding energy of sodium chloride is taken to be well represented by the electrostatic theory of ionic crystals of Born and Mayer (Zs. f. Phys., 75, 1, 1932; J. Chem. Phys., 1, 270, 343, 1933). The crystal field is taken from this theory with corrections for the finite size of ions. The author follows the treatment of Williams (J. Chem. Phys., 19, 457, 1951) for KCl:Tl. The luminescent centre is taken to be a silver (Ag^+) ion, which

Card 1/2

AVAILABLE: September 6, 1956.

POTEKHINA, N.D.

48-4-26/48

SUBJECT: USSR/Luminescence

AUTHOR: Potekhina N.D.

TITLE: On the Problem of Calculating the Spectra of Crystallophosphor Luminescence (K voprosu o raschete spektrov lyuminesstentsii kristallofosforov)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Seriya Fizicheskaya, 1957, Vol 21, #4, pp 545-546 (USSR)

ABSTRACT: Experimentally observed absorption bands with a maximum at 210 m μ and emission bands with a maximum at 250 m μ in the NaCl-Ag crystallophosphor are ascribed to transitions in silver ions, but the mode of transitions remained unknown.

In order to clear up this problem, a theoretical calculation of emission and absorption bands in the silver ion was performed making use of the Williams (1) method.

The comparison of calculated bands with those observed leads to a conclusion that $^3P_1 - ^1S_0$ transitions in the silver ion are responsible for these bands. However, this result cannot be considered as final.

Card 1/2

PO T E K H I N A, N. D.

24.7700
2477-24767
AUTHORS:

67390
SOV/181-1-2-3/1
BRYLKO, S. M., LASHOV, I. L., GRIKBERG, A. A., DAVYDOV, G. R.,
POZDNYAKOVA, A. A.

TITLE: A New Longitudinal Magnetostatic Effect and Its Application to the Determination of the Ratio Between the Concentrations of Heavy and Light Holes

PERIODICAL: Fizika Tverdogo Tela, 1959, Vol. 1, No. 9, pp. 1372-1377, (USSR)

ABSTRACT: When investigating the diffusion of the nonequilibrium carrier in the magnetic field, the appearance of electrical fields is usually studied (e.g., the photomagnetic Kikoin-Moskov effect). The present paper offers the results obtained from an investigation of the concentration distribution of the minority carrier in the magnetic field, and in particular, the results of an investigation of the longitudinal magnetostatic effect in the photomagnetic field. A place-parallel semiconductor plate, perpendicular to the magnetic field, is placed in a magnetic field. On the plate, a nonequilibrium carrier is injected through the plate and the collector determined the concentration of the minority carrier. The concentration

Card 1/5

recorded thereby increased with H . Figure 1 shows a schematic representation of the measuring arrangement, a description of which is given. Theoretically, one obtains for the concentration of the injected carrier on the x -axis

$$(\bar{n}||x)/\Delta n_0 = \frac{4\beta_0}{2D_0 \pi \sqrt{1 - \beta_0^2}} \cdot \text{where } \beta_0 \text{ is the electron-hole pair production rate, } l_D \text{ the diffusion length, } D_0 \text{ the electron diffusion coefficient. Figure 2 shows the result obtained by an attempt of experimentally verifying this formula for electron injection into hole-type germanium. The theoretical agreement is obtained with microscopic drift mobility of the electrons } \mu_n = 3650 \text{ cm}^2/\text{v}\cdot\text{sec. When investigating the hole diffusion in n-type germanium a considerable divergence between theory and experiment is observed, which, however, can be explained when taking into account the existence of heavy and light holes. The theoretical curve drawn for this case nicely describes the experimental results. The concentration ratio between heavy and light holes is obtained from the experimental results as being 571 this value approaches the result (560) obtained by an other way (Ref. 1). There are 2 figures and 2 references.$$

Card 2/5

SUBMITTED: March 7, 1959

Card 3/5

66330

SOV/181-1-10-3/21

~~24(3)~~ 24.7700

AUTHOR: Potekhina, N. D.

TITLE: Calculation of the Relaxation Processes of a Phototriode at Low Illumination Intensities

PERIODICAL: Fizika tverdogo tela, 1959, Vol 1, Nr 10, pp 1509 - 1515 (USSR)

ABSTRACT: Ryvkin and Strokan (Ref 1) gave a qualitative description of phototriode kinetics, and they also suggested the calculation of relaxation processes in a phototriode. For this purpose the author of the present paper investigates a p-n-p-transition (Fig 1) for equal p-range conductivities with application of a low external voltage; the base remained floating. By illumination of the base additional electron-hole pairs were produced in it, so that the potential difference between emitter and base increased and the amperage increased. A similar problem, but in the steady case, has already been investigated. The author aims at determining the law governing potential difference and current, with and without illumination. The problem thus consists in determining the relaxation curves. Starting from expressions for $\partial p/\partial t$ as well as $\partial n/\partial t$

Card 1/2

RYBKIN, S.M.; GRINBERG, A.A.; IVANOV, Yu.L.; NOVIKOV, S.R.; POTEKHINA, N.D.

Investigating the diffusion of minority current carriers in a
magnetic field. Fiz. tver. tela 2 no.4:575-590 Ap '60.
(MIRA 13:10)

1. Leningradskiy fiziko-tekhnicheskiy institut AN SSSR.
(Diffusion) (Magnetic fields) (Semiconductors)

20523
S/051/60/008/06/014/024
E201/E691

24.3500

AUTHOR: Potekhina, N.D.

TITLE: A Contribution to the Theory of Luminescence of Impure Crystal Phosphors

PERIODICAL: Optika i spektroskopiya, 1960, Vol 8, Nr 6, pp 832-838 (USSR)

ABSTRACT: F.E. Williams suggested in 1951 (Ref 1) a method of calculating the positions of the luminescence bands of alkali-halide crystal phosphors. The advantage of his method was its comparative simplicity and the agreement of theoretical predictions with experimental results, at least for KCl-Tl. The disadvantage of the method lay in its lack of theoretical justification of the method of calculating the impurity centre energies in the excited state. A quantum-mechanical analysis of Williams's method in the case of NaCl-Ag showed that the "repulsion energy" found by him for the excited state represents the sum of the S-energy and the exchange energy and does not include, in contrast to the case of the ground state, the energy of Coulomb overlapping.

Card 1/2

GUBANOV, A.S.; POPEKHA, M.D.

Effect of atom migration along a grain boundary on the rate of diffusion.

Enur. tekhn. fiz. 34 no.10:1880-1884, 1964.

(U.S.S.R.)

1. Fiziko-tekhnicheskiy institut im. A.F. Lofty AN SSSR, Leningrad.

L 3636-66 EWT(m)/EWP(c) JD/JG

ACCESSION NR: AP5024046

UR/0057/65/035/009/1658/1661

537.57

AUTHOR: Potekhina, N.D.

TITLE: Investigation of surface ionization of lithium chloride on rhenium

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 35, no. 9, 1965, 1658-1661

TOPIC TAGS: surface ionization, alkali halide, rhenium, physical chemistry theory, chemical equilibrium

ABSTRACT: Theories of surface ionization of alkali halides have been given by S.V.Starodubtsev (Trudy FFI Uz.SSR, II, No.1, p.5, 1948) and by G.M.Pyatigorskiy (ZhTF, 35, 1127, 1965). In the first of these treatments association on the surface was neglected, and in the second it was assumed that equilibrium between association and dissociation obtains on the surface. In the present paper the theory of alkali halide surface ionization is freed from both these restrictions and it is shown how one can determine from the temperature dependencies of the ion current at two different incident beam intensities which, if either, of the approximations is valid in a particular case. The improved theory is employed to discuss the experimental data of E.Ya.Zandberg and A.Ya.Tontegode (ZhTF, 35, 1115, 1965)

Card 1/2

L 3636-66

ACCESSION NR: AP5024046

on the ionization of LiCl on a Re surface. The explanation found here for the observed behavior of LiCl on Re is not in qualitative contradiction with that offered by Zandberg and Tontegode in their original paper. "In conclusion, I thank E.Ya.Zandberg, N.I.Ionov, and A.Ya.Tontegode for discussing the questions expounded here." Orig. art. has: 21 formulas, 1 figure, and 1 table.

ASSOCIATION: Fiziko-tehnicheskii institut im. A.F.Ioffe AN SSSR, Leningrad
(Physico-technical Institute, AN SSSR)

SUBMITTED: 21Jan65

ENCL: 00

SUB CODE: GC, NP

NR REF SOV: 005

OTHER: 000

BYK
Card 2/2

POTEKHINA, N.D.

Surface ionization of LiCl on rhenium. Zhur. tekhn. fiz. 35 no.9:1658-
1661 S '65. (MIRA 18:10)

1. Fiziko-tekhnicheskiy institut imeni A.F.Ioffe AN SSSR, Leningrad.

POTEKHINA, N.D.

Theory of surface ionization. Zhur. tekhn. fiz. 34 no.6:
1086-1091 Je '64. (MIRA 17:9)

1. Fiziko-tekhnicheskii institut imeni A.F. Ioffe AN SSSR,
Leningrad.

L 10750-65 EWT(a)/EWP(b) AS(mp)-2/SSD/AFWL/ASD(f)-2/ASD(d)/AEDC(a) JD

ACCESSION NR: AP4046353

S/0057/64/034/010/1888/1894

AUTHOR: Gubanov, A.I.; Potelkhina, N.D.

TITLE: Effect on desorption of the migration of atoms on the surface of a metal ¹⁸ 16

SOURCE: Zhurnal tekhnicheskoy fiziki, v.34, no.10, 1964, 1888-1894

TOPIC TAGS: adsorption, surface diffusion, nonsteady flow, nonuniform adsorber

ABSTRACT: Adsorption on a nonuniform surface is discussed theoretically. It is assumed that the adsorbing surface consists of a finite number of regions with different properties, and that the rate of migration of adatoms from one region to another is proportional to the number of adatoms on the first region and the number of vacant sites on the other. A set of differential equations is derived for the time variation, under nonequilibrium conditions, of the numbers of adatoms on the various regions of the adsorber. These equations are replaced by a set of linear homogeneous differential equations by assuming that in each region the number of adatoms is small compared with the number of vacant sites, and the linear equations for the case of two regions are solved. Solutions for an adsorber initially in equilibrium are obtained both for the case of a sudden change of temperature and for ar-

1/2

L 10750-65
 ACCESSION NR: AP4046353

3
 bitrary continuous variation of temperature. Limiting forms are derived for the two cases when the loss of adatoms from a region by migration is large and when it is small compared with the loss by desorption. The dependence of the coefficients describing the migration rate on the shape of the regions is discussed briefly. The calculations are not applicable to surface ionization or to adsorption by semiconductors, where both adsorbed atoms and ions are present. "In conclusion, we convey our deep gratitude to Professors N.I. Ionov and E.Ya. Zandberg for suggesting the topic and for useful discussions." Orig.art.has: 43 formulas and 2 figures.

ASSOCIATION: Fiziko-tekhnicheskii institut im.A.F.Ioffe AN SSSR, Leningrad (Physico-technical Institute, AN SSSR)

SUBMITTED: 03Jan64

ENCL: 00

SUB CODE: GC, SS

NR REF SOV: 003

OTHER: 000

2/2

S/0057/64/034/006/1086/1091

ACCESSION NR: AP4040314

AUTHOR: Potekhina, N.D.

TITLE: On the theory of surface ionization

SOURCE: Zhurnal tekhnicheskoy fiziki, v.34, no.6, 1964, 1086-1091

TOPIC TAGS: ionization, surface ionization, statistical mechanics, statistical physics, adsorption

ABSTRACT: A statistical mechanical derivation is given of the temperature dependence of the coefficients C and D in the equation

$$J_0 = N \left(C e^{-\frac{\mu_p}{kT}} + D e^{-\frac{\mu_a}{kT}} \right),$$

relating the flux J_0 of atoms incident on a surface, the surface density N of adsorbed atoms, and the heats of desorption μ_p, μ_a of ions and atoms, respectively. The two terms on the right represent the flux of ions and atoms, respectively, from the surface, the sum of which must equal the incident flux at equilibrium. The calculation is performed separately for the two cases that the energy of the valence electron of the adatom does or does not lie within the conduction band of the ad-

Card 1/3

ACCESSION NR: AP4040314

sorbing solid. In both cases the relevant partition functions are calculated on the assumption that the adatoms move freely on the surface and are bound to it by harmonic forces. In the case of a non-conducting adsorber, the equilibrium between the adsorbed atoms, ions, and surface electrons is included in the discussion, and the Saha-Langmuir equation for the ratio of the flux of escaping ions to that of atoms is derived. The conclusion of G.M.Avak'yants (Trudy AN Uzb SSR 5,33,1953; Izv. AN Uzb.SSR 3,109,1954) that the Saha-Langmuir equation does not hold is criticized, and Avak'yants' error is pointed out. In the case of a conducting adsorber the atoms are regarded as ionized, and the probability that an adsorbed ion leaves the surface as a neutral atom is calculated from the Saha-Langmuir equation. The dependence of the coefficients C and D on temperature is discussed briefly in several limiting cases, and it is concluded that E.Ya.Zandberg, V.I.Pavleyev and A.Ya.Tontegode (ZhTF 33,206,1960; 32,208,1962) were justified in neglecting the temperature dependence of these coefficients in their investigation of the ionization of cesium on tungsten surfaces. "In conclusion I express my deep gratitude to A.I.Gubanov and E.Ya.Zandberg for discussing the problems treated." Orig.art.has: 26 formulas.

Card 2/3

ACCESSION NR: AP4040314

ASSOCIATION: Fiziko-tekhnicheskiy institut im.A.F.Ioffe AN SSSR, Leningrad (Physico-
technical Institute, AN SSSR)

SUBMITTED: 10Jun63

SUB CODE: NP, EM

DATE ACQ: 18Jun64

NR REF SOV:010.

ENCL: 00

OTHER:001

Card 3/3 .

133180-65 EWT(1)/EWT(m)/EPF(c)/EPA(w)-2/EEC(t)/T/EWA(m)-2 Pr-4/Pab-10

MISSION No: AP5005236

8/04/67/05/035/002/0017/0324

AUTHOR: Potekhina, N.D.

TITLE: Influence on surface ionization of adatom migration along a nonuniform surface

SOURCE: Zhurnatl tekhnicheskoy fiziki, v.35, no.2, 1965, 317-324

TOPIC TAGS: surface ionization, surface diffusion, nonuniform surface

ABSTRACT: The author, in collaboration with A.I.Gubanov (ZhTF 34,1888,1964 [see abstract AP4046353]), has discussed the effect of adatom (adsorbed atom) migration on desorption. In the present paper she extends this discussion to the case of surface ionization. The results and notation of the previous paper are employed. The ionizing surface is assumed to consist of alternating regions of two kinds which differ in work function and heat of desorption, the regions with the greater work function having also the larger heat of desorption. The equations for a stationary state are written, the influence of the contact potential field above the metal surface on the motion of the ions is taken into account, and the solution is discussed for the cases of weak, moderate and strong migration. The influence of a

Card 1/2

1 15180-66

ACCESSION NR: AP5005236

strong external electric field is discussed. The field is found to reduce the influence of migration. The time dependent equations for non-stationary conditions are written and their solution is discussed, again for the cases of weak, moderate and strong migration. It is found that the influence of adatom migration on surface ionization is important only under conditions deviating widely from equilibrium. "In conclusion, I express my gratitude to A. L. Gubanov, A. Ya. Zapevalov and N. I. Ionov for discussing the questions raised." Orig. art. has: 27 formulas, 2 figures and 2 tables.

ASSOCIATION: Fiziko-tekhnicheskiy institut im. A. F. Ioffe, AN SSSR, Leningrad
(Physicotechnical Institute, AN SSSR)

SUBMITTED: 25Apr64

ENCL: 00

SUB CODE: NP, EM

NR REF SOW: 004

OTHER: 001

Card 2/2

POTEKHINA, N.S.

Fascioliasis in children. Zdrav.Bel. 8 no.12:67 D '62.
(MIRA 16:1)

1. Detskoye otdeleniye (zav. otdeleniyem N.S.Potekhina)
Brestskoy oblastnoy bol'nitsy (glavnyy vrach - zasluzhennyy
vrach BSSR V.G.Tishchenko.
(LIVER FLUKE)

POTEKHINA, T.V.

Efforts to combat soil erosion on state farms west of the Volga
in Saratov Province. Trudy MIIZ no.11:19-33 '61. (MIRA 14:9)
(Saratov Province--Erosion)

L 56675-65 EWT(m)/EPF(c)/ENP(j)/T Pc-4/Pr-4 RM
ACCESSION NR: AP5017850

UR/0286/65/000/011/0081/0081
678.028.294

AUTHOR: Pesin, L. M.; Potekhina, Ye. S.; Gurman, I. M.; Rabkina, A. E.; Runova,
S. M.; Tsinman, F. Ye.; Malysheva, Ye. V.

TITLE: A method for producing epoxy materials. ^f Class 39, No. 171582 ¹⁵

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 11, 1965, 81

TOPIC TAGS: epoxy resin, epoxy plastic

ABSTRACT: This Author's Certificate introduces: 1. A method for producing epoxy materials using a hardener based on anilinoformaldehyde condensate. A wider selection of epoxy materials is produced by using the product of the interaction between anhydroformaldehyde aniline and monoethynolamine as the hardener. 2. A modification of this method in which the hardener is the product of the interaction between anhydroformaldehyde aniline and monoethynolamine in a mixture with other epoxy resin hardeners of the amine type.

ASSOCIATION: Nauchno-issledovatel'skiy institut plasticheskikh mass (Scientific

Card 1/2

L 56675-65

ACCESSION NR: AP5017850

Research Institute of Plastics)

SUBMITTED: 19Mar64

ENCL: 00

SUB CODE: MT, 00

NO REF SOV: 000

OTHER: 000

284
Card 2/2

L 31920-66 EWT(m)/EWP(j)/T IJP(c) RM

ACC NR: AF6007971 (A)

SOURCE CODE: UR/0191/66/000/003/0054/0057

AUTHOR: Botokhina, Ye. S.; Moldavskiy, B. L.; Molotkov, R. V.; Batalin, O. Ye.;
Buslovich, Ye. Ya.; Rubinsteyn, E. I.; Ravkina, A. E.; Khanukova, E. S.; Slo-
bina, A. V.; Lykova, T. A.; Bychkova, V. A.

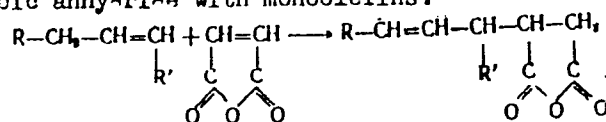
ORG: none

TITLE: Alkenylsuccinic acid anhydrides as hardening agents for epoxy resins

SOURCE: Plasticheskiye massy, no. 3, 1966, 54-57

TOPIC TAGS: epoxy plastic, hardening, solid mechanical property

ABSTRACT: The authors studied the synthesis and use of alkenylsuccinic acid anhydrides as liquid and low-toxic hardening agents for epoxy resins. The anhydrides were synthesized in an electrically heated steel autoclave with a mixing device by the reaction of maleic anhydride with monoolefins:



The following anhydrides were prepared: (acid, boiling point in °C, at pressure in mm)
 crotylsuccinic, 122-147, 8; pentenylsuccinic, 135-148, 8; heptenylsuccinic, 124-210,

Card 1/2

UIC: 678.643'42'5:678.043

L 31920-66

ACC NR: AP6007971

2
5; and a mixture of isooctenyl- and isononenylsuccinic (ASA), 155-169, 8. Epoxy resins ED-5, ED-6, and EDL were hardened by ASA at 140C for 24 hr, using 93-115, 73-93- and 47-57 g of ASA over 100 g of epoxy resins respectively. Using dimethyl-amine or triethanolamine as the accelerators, the hardening process was accomplished within 1.5-2 hr at 100C. With the exception of thermal stability, which was 25-35C lower, the physicochemical properties of the products obtained resembled very closely those obtained by the use of maleic anhydride as the hardening agent. Orig. art. has: 6 tables, 4 fig., and 1 formula.

SUB CODE: 11,07/ SUBM DATE: none/ ORIG REF: 004/ OTH REF: 003

Card 2/2

L 52127-65 EPF(c)/EWP(j)/EWT(m)/T Pc-4/Pr-4 RM

ACCESSION NR: AP5015282

UR/0286/65/000/009/0065/0065

AUTHORS: Moldavskiy, B. L.; Batalin, O. Ye.; Zheleznyak, E. N.; Pesin, L. M.;
Potekhina, Ye. S.; Rabkina, A. E.; Bychkova, V. A.

TITLE: A method for obtaining epoxy compositions. Class 39, No. 170654

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 9, 1965, 65

TOPIC TAGS: epoxy, succinic acid, cumylsuccinic acid

ABSTRACT: This Author Certificate presents a method for obtaining epoxy compositions by applying the anhydride of substituted succinic acid as a hardener. To simplify the technique of hardening, the anhydride of cumylsuccinic acid is used as a hardener.

ASSOCIATION: Gosudarstvennyy nauchno-issledovatel'skiy institut plastmass (State Scientific Research Institute of Plastics)

SUBMITTED: 18May64

ENCL: 00

SUB CODE: 00, MT

NO REF SOV: 000

OTHER: 000

Card 1/1 *mb*

POTEKHINA, Ye. V.

Fertility and spawning period of the Aral barbel. Vop. ikht. no. 3:
11-86 '55. (MIRA 8:11)

1. Syr-Dar'inskaya rybovodno-biologicheskaya stantsiya Glavrybvoda
(Aral Sea--Barbel (Fish))

S/182/62/000/007/005/007
D040/D113

AUTHOR: Potekushin, N.V.

TITLE: Press forging instead of machining

PERIODICAL: Kuznechno-shtampovochnoye proizvodstvo, no. 7, 1962, 39-40

TEXT: The Chelyabinskiy traktornyy zavod (Chelyabinsk Tractor Plant) has developed a method of hot extruding hollow piston blanks, which reduced the amount of machining operations to 20%, and the metal waste to 251 kg per thousand pistons. Piston blanks are extruded in a 1000-t crank press, in a single pass. The universal die set is shown in a drawing. Initial billets of round and spherical shape proved to be the best of all shapes tried in experiments, particularly spherical billets because of their accurate position in the die. Blanks are extruded at a temperature below the critical point and have a high dimension accuracy and a bright surface. The article includes calculation data for the punch and die dimensions and tolerances, and the formula for determining the required press effort. A cross section figure of a drawn blank and of a ready piston is included. There are 4 figures and 1 table.

Card 1/1

POTEKUSHIN, N.V.

Pressing instead of machining. Kuz.-~~sh~~tam. proizv. 4 no.7:39-40
Jl '62. (MIRA 15:7)
(Forging)

POTEKUSHIN, Nikolay Vasil'yevich; SHCHERBAKOV, V.I., inzh., retsenzent;
KOVALENKO, A.V., inzh., red.; DUGINA, N.A., tekhn.red.

[Economy of sheet metal] Ekonomiya listovogo metalla. Pod red.
A.V.Kovalenko. Moskva, Mashgiz, 1961. 28 p.

(MIRA 15:2)

(Sheet-metal work)

POTLUKUSHIN, Nikolay Vasil'yevich; SOROKIN, A.I., kand. tekhn.
nauk, nauchn. red.; SVET, Ye.B., red.

[Saving metals in cold pressing; practice of the machinery
plants of the Chelyabinsk Economic Region] Ekonomika metal-
la v kholodnoshtempovom proizvodstve; iz opyta mashino-
stroitel'nykh zavodov Cheliabinskogo ekonomicheskogo raio-
na. Cheliabinsk, Cheliabinskoe knizhnoe izd-vo, 1962. 65 p.
(MIRA 17:9)

GOLIKOV, Aleksandr Arsen'yevich; POTEKUSHIN, Nikolay Vasil'yevich;
GOLUBEVA, K.A., inzh., rétsenzent; MASLIY, K.Ya., zuborez,
retsenszent; ZHUKOV, P.A., kand.ekon.nauk, red.; VOLOSATOV,
A.Ya., red. vypuska; BELYAKOV, M.N., red.; KON'KOV, A.S.,
inzh., red.; ROZENBERG, I.A., kand.ekon.nauk, red.; SMIR-
NITSKIY, Ye.K., kand.ekon.nauk, red.; SUSTAVOV, M.I., inzh.
red.; DUGINA, N.A., tekhn.red.

[How to save metals] Kak luchshe ekonomit' metall. Moskva,
Mashgiz, 1960. 40 p. (Biblioteka rabochego mashinostroitelia.
Seria: "Osnovy konkretnoi ekonomiki," no.9) (MIRA 14:5)
(Metalwork) (Metals, Substitutes for)

POTEKUSHIN, N.V.; VEGNER, L.I.

"Designing dies for die stamping" by IU.S.Tarasevich. Reviewed by N.V.Potekushin, L.I.Vegner. Kuz.-shtam.proizv. 1
no.11:46-47 N '59. (MIRA 13:3)
(Dies (Metalworking))

POTEKUSHIN, N.V.

Electric upsetting on eccentric presses. Kuz.-shtam. proizv.
1 no.8:42-44 Ag '59. (MIRA 12:12)
(Forging) (Electric heating)